FORM PTO-1390 (REV. 10-2003) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE ATTORNEY'S DOCKET NUMBER TRANSMITTAL LETTER TO THE UNITED STATES 082123-0310458 U.S. APPLICATION NO. (If known, see 37 CFR 1.5 DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED Jan. 11, 2002 11.01.2002 10 January 2003 (10.01.03) PCT/KR03/00051 TITLE OF INVENTION INCREASING A REFRESH PERIOD IN A SEMICONDUCTOR MEMORY DEVICE APPLICANT(S) FOR DO/EO/US KIM, JUNG PILL Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: 1. This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. X An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. b. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)). 9. X An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. X An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 11. X 12. X An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. X A preliminary amendment. 14. X An Application Data Sheet under 37 CFR 1.76. 15. A substitute specification. 16. X A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 17. A second copy of the published international application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. X Other items or information: **PCT** Request Notification of Transmittal of International Preliminary Examination Report, and the IPER Notification of Transmittal of the International Search Report or the Declaration, + the Search Report

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U.S. APPLICATION NO. (if know	07500922	3/00051	ATTORNEYS DOCKET NUMBER 082123-0310458					
	ring fees are submitted:	<u> </u>		CAI	LCULATIONS P			
	FEE (37 CFR 1.492 (a) (	(1) - (5)):						
Neither internation nor international se	nal preliminary examinati earch fee (37 CFR 1.445) Search Report not prepare							
International prelin USPTO but Interna	ninary examination fee (? ational Search Report pre	37 CFR 1.482) not paid to epared by the EPO or JPO	\$1080.00					
International prelim but international se	ninary examination fee (3 cFR 1.445)	(37 CFR 1.482) not paid to (a)(2)) paid to USPTO	USPTO \$770.00					
but all claims did n	ot satisfy provisions of Po	37 CFR 1.482) paid to USI CT Article 33(1)-(4)	\$730.00					
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)								
				\$	1,080.00	<b> </b>		
from the earliest clai	imed priority date (37 CF			\$	0.00			
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$				
Total claims	23 - 20 =	3	x \$18.00	\$	54.00			
Independent claims	4 -3 =	1 1	x \$86.00	\$	86.00			
MULTIPLE DEPEN	DENT CLAIM(S) (if app	<del>*</del>	+ \$290.00	\$	0.00			
		OF ABOVE CALCU		\$	1,220.00			
Applicant claim are reduced by 1/2		e 37 CFR 1.27. The fees in	ndicated above	\$	0.00			
		S	UBTOTAL =	\$	1,220.00			
Processing fee of \$13 from the earliest clai	30.00 for furnishing the E imed priority date (37 CF)	English translation later the FR 1.492(f)).	an 30 months	\$	0.00			
TOTAL NATIONAL FEE =					1,220.00			
Fee for recording the accompanied by an a	enclosed assignment (37 appropriate cover sheet (3	7 CFR 1.21(h)). The assig 37 CFR 3.28, 3.31). \$40.00	gnment must be 0 per property +	\$	40.00			
		TOTAL FEES E	NCLOSED =	\$	1,260.00			
					ount to be efunded:	\$		
					charged:	\$ 1260.00		
a. A check in the amount of \$ to cover the above fees is enclosed.								
	ge my Deposit Account Ne copy of this sheet is encl	No. <u>033975</u> in	the amount of $\$ 1,26$	60.00	to cover th	e above fees.		
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c. X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 033975 . A duplicate copy of this sheet is enclosed.								
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.								
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.								
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SEND ALL CORRESPONDENCE TO:  Kerry T. Hartman  SIGNATURE								
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PILLSBURY WINTHROP LLP P.O. Box 10500 Kerry 7					tman			
McLean, VA 22								
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Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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FEE TRANSMITTAL  for FY 2004  Application Number    Application Number   Filing Date   July 8, 2004	FFF TDANCMITTA	.	Complete if Known							
Charge fee(s) indicated below except for the filling fee to the sub-vicinstified depoil account.   Size Fee Description   Size Fee Fee Fee Fee Fee Fee Fee Fee Fee F	FEE IRANSWILLA	니	Application Number							
Applicant claims small entity status. See 37 CFR 1.27   Examiner Name	for EV 2004		Filing Date Ju			July 8, 2	July 8, 2004			
Applicant claims small entity status. See 37 CFR 1.27   TOTAL AMOUNT OF PAYMENT   (\$) 1,260.00   Affunit   Attorney Docket No. 082123-0310458			First Named Inventor JUNG			JUNG P	ILL KIM			
TOTAL AMOUNT OF PAYMENT   (\$) 1,260.00   Attorney Docket No.   082123-0310458	Effective 10/01/2003. Patent fees are subject to annual revision.									
METHOD OF PAYMENT (check all that apply)	Applicant claims small entity status. See 37 CFR 1.27									
METHOD OF PAYMENT (check all that apply)   See Calculation (continued)	TOTAL AMOUNT OF PAYMENT (\$) 1,260.00				082123-03	10458				
Supposit	METHOD OF PAYMENT (check all that apply)									
Deposit	Check Credit card Money Other None									
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Number   Deposit   PILLSBURY WINTHROP LLP   1053   130   2051   50   Surcharge - late fitting fee or cath   1053   130	Deposit Account 033975	Code	e (\$)	Code	(\$)		·			Fee Paid
PILLSBURY WINTHROP LLP   Name   Pile Director is authorized to: (check all that apply)   1503   130   1053   130   Non-English specification   1812   2,520   1810   2,520   1812   2,520   1810   2,520   1810   2,520   1810   2,520	Number						-	-		<b></b>
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to the above-identified deposit account.    Test   Total Claims		1004	320			Exam	iner action			
1. BASIC FILING FEE   Large Entity   Small Entity   Fee Fee   Fee Paid   1401   300   2401   155   165   1		1805	1,840*	1805	1,840*	Requi	esting public iner action	cation of SIR a	after	<u> </u>
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1002 340   2002 170   Design filing fee   1401   330   2401   165   Notice of Appeal   1003 530   2003 265   Plant filing fee   1403   330   2402   165   Filing brief in support of an appeal   1403   290   2403   145   Request for oral hearing   1403   1405   290   2403   145   Request for oral hearing   1403   1405   1403   1405   14		1								<del></del>
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1005 160   2005 80   Provisional filing fee   SUBTOTAL (1) (\$\\$) 0.00   1452   110   2452   55   Petition to institute a public use proceeding   1451 1,510   1451 1,510   Petition to institute a public use proceeding   1452   110   1452	<b>I</b>								eai	
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2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE    Fee from below   Fee Paid   Independent				2452						
Total Claims		1453	1,330	2453	665	Petitio	on to revive	- unintentiona	1	
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SUBTOTAL (2) (\$) 140.00  **or number previously paid, if greater; For Reissues, see above  SUBMITTED BY  Name (Print/Type) Kerry T. Hartman  And over original patent  (\$) 140.00  (\$) 140.00  *Reduced by Basic National Fee  *Reduced by Basic Filing Fee Paid  (\$) \$UBTOTAL (3) (\$) 1,120.00  *Registration No. (Altory/Agent)  *Registration No. (Altory/Agent)  *Telephone (703) 905-2085	1205 18 2205 9 ** Reissue claims in excess of 20			1		Requ	est for expe	dited examina		
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Name (PrintlType) Kerry T. Hartman Registration No. (Attorned Agent) 41818 Telephone (703) 905-2085	or number previously baid, it greater, it or recisions, see above									1,120.00
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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.